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[New Hampshire Code of Administrative Rules](#)
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CHAPTER Env-A 2100 PROCESS, MANUFACTURING AND SERVICE-BASED INDUSTRIES

Statutory Authority: RSA 125-C:4

PART Env-A 2101 PURPOSE

Env-A 2101.01 Purpose. The purpose of this chapter is to establish standards for particulate matter, acid mists, visible emissions, sulfur dioxide, and nitrogen oxides for those sources or devices utilized at process, manufacturing or service-based industries which are not specifically regulated pursuant to any other chapter, part, or section of this subtitle.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2102 SCOPE

Env-A 2102.01 Scope.

(a) Subject to (b), below, this chapter shall apply to any person who owns or operates a source or device utilized at a process, manufacturing, service-based industry or other source of particulate matter, acid mists, visible emissions, sulfur dioxide, or nitrogen oxides in the state.

(b) Those process, manufacturing, service-based industries or other sources of particulate matter, acid mists, visible emissions, sulfur dioxide, or nitrogen oxides which are governed specifically by other chapters, parts or sections of this subtitle shall be controlled by those particular chapters, parts or sections.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2103 EMISSION STANDARDS FOR PARTICULATE MATTER

Env-A 2103.01 Emission Standards for Particulate Matter.

(a) For any source or device installed after February 18, 1972 and utilized at a process, manufacturing or service-based industry, no person shall cause or allow the emission of particulate matter at such source or device to exceed those emission standards specified for "New Devices" as listed in Table 2103-1, in (c), below.

(b) For any source or device installed prior to or on February 18, 1972 and utilized at a process, manufacturing or service-based industry, no person shall cause or allow the emission of particulate matter at such source or device to exceed those emission standards specified for "Existing Devices" as listed in Table 2103-1, in (c), below:

(c) Particulate matter emission standards shall be as set forth in Table 2103-1, below:

Table 2103-1 Particulate Matter Emission Standards

Process Weight Rate (pounds per hour):	Emission Standard for "New Devices" Installed After February 18, 1972: (pounds per hour):	Emission Standard for "Existing Devices" Installed Prior to or on February 18, 1972 (pounds per hour):
50	0.36	0.43
100	0.55	0.68
500	1.53	1.99
1,000	2.58	3.17
5,000	7.58	9.35

10,000	12.0	14.85
20,000	19.2	23.62
60,000	40.0	49.31
80,000	42.5	51.03
120,000	46.3	55.55
160,000	49.0	58.88
200,000	51.2	61.53
1,000,000	69.0	82.75
2,000,000	77.6	93.11

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2103.02 Calculation of Particulate Matter Emission Standards.

(a) Where the process weight rate is not explicitly stated in Table 2103-1, above, the maximum allowable particulate matter emission rate shall be calculated by the equation which is applicable for the particular process weight, as designated in (b) through (e), below, where:

- (1) "E" means the maximum allowable particulate matter emission rate in pounds per hour; and
- (2) "P" means the process weight rate in tons per hour.

(b) For an "Existing Device" installed prior to or on February 18, 1972 with a process weight rate:

- (1) Up to 60,000 pounds per hour, P shall be raised to the 0.67 power and multiply the result by 5.05, as in the formula below:

$$E = 5.05 P^{0.67}$$

- (2) In excess of 60,000 pounds per hour, P shall be raised to the 0.11 power and multiply the result by 66.0, and then subtract 48, as in the formula below:

$$E = 66.0 P^{0.11} - 48$$

(c) For a "New Device" installed after February 18, 1972 with a process weight rate:

- (1) Up to 60,000 pounds per hour, P shall be raised to the 0.67 power and multiply the result by 4.10, as in the formula below:

$$E = 4.10 P^{0.67}$$

- (2) In excess of 60,000 pounds per hour, P shall be raised to the 0.11 power and multiply that result by 55.0 and then subtract 40, as in the formula below:

$$E = 55.0 P^{0.11} - 40$$

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2104 EMISSION STANDARDS FOR TOXIC PARTICULATE MATTER

Env-A 2104.01 Emission Standards for Toxic Particulate Matter. No person shall cause or allow the emission of any toxic particulate matter specified in Table 2104-1, in (d), below, to exceed the toxic particulate matter emission standard as calculated pursuant to this part.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2104.02 Calculation of Toxic Particulate Matter Emission Standards.

(a) The toxic particulate matter standard shall be calculated by adjusting the applicable emission standard determined pursuant to Env-A 2103, in accordance with the formula in (b), below, where:

- (1) "AE" means the toxic particulate matter emission standard in pounds per hour;
- (2) "E" means the emissions standard in pounds per hour as determined pursuant to Env-A 2103; and
- (3) "F" means the effects factor as designated in Table 2104-1, below.

(b) To calculate the toxic particulate matter emission standard, the emission standard determined pursuant to Env-A 2103 shall be multiplied by the effects factor for the specific toxic particulate matter designated in Table 2103-2, as in the formula below:

$$AE = E \times F$$

(c) When 2 or more toxic particulate matter elements or compounds are emitted from the same stack, the most stringent effects factor of all particulate matter elements or compounds shall be used to determine the toxic particulate matter emission standard for such stack.

(d) Effects factors for toxic particulate matter emissions shall be as set forth in Table 2104-1, below:

Table 2104-1 Effects Factors For Toxic Particulate Matter

<u>CAS Number</u>	<u>Toxic Particulate Matter</u>	<u>Effects Factor</u>
7440-36-0	Antimony	0.9
7440-38-2	Arsenic	0.9
7440-39-3	Barium	0.9
7440-43-9	Cadmium	0.2
7440-47-3	Chromium	0.2
7440-48-4	Cobalt	0.9
7440-50-8	Copper	0.2
7440-58-6	Hafnium	0.9
7439-92-1	Lead - Lead arsenate	0.3
7580-67-8	Lithium hydride	0.04
7723-14-0	Phosphorus	0.2
7782-49-2	Selenium	0.2
7740-22-4	Silver	0.1
13494-80-9	Tellurium	0.2
7440-28-0	Thallium	0.2
7440-61-1	Uranium (soluble)	0.1
7440-61-1	Uranium (insoluble)	0.4
7440-62-2	Vanadium	0.2
1314-13-2	Zinc Oxide	0.8
7631-86-9	Crystalline Silica	0.4

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2105 SPECIFIC TOXIC PARTICULATE EMISSION STANDARDS

Env-A 2105.01 Toxic Particulate Matter Emission Standard and Ambient Air Concentration for Beryllium. No person shall cause or allow the emission of beryllium, CAS number 7440-41-7, from a source or device to exceed the emission standard of 10 grams over a 24-hour period, or the ambient air concentration of 0.01 ug/m³ averaged over a 30-day period and measured in the vicinity of the source or device.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2105.02 Toxic Particulate Matter Emission Standard for Mercury. No person shall cause or allow the emission of mercury, CAS number 7439-97-6, from any stationary source which processes mercury ore or recovers mercury, or one which uses mercury cathode cells to produce chlorine gas and alkali metal hydroxide, to exceed the emission standard of 2300 grams per 24-hour period.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2105.03 Toxic Particulate Matter Emission Standard for Asbestos. No person shall cause or allow the emission of asbestos, CAS number 1332-21-4, in excess of those limits specified in 40 CFR 61.144.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2106 EMISSION STANDARDS FOR ACID MISTS AND VAPORS

Env-A 2106.01 Emission Standards for Acid Mists, Including Sulfur Dioxide Mists, and Nitrogen Oxide Mists.

(a) Subject to Env-A 2106.02 through Env-A 2106.04, below, for those particular kinds of acid mists listed in Table 2106-1, below, no person shall cause or allow the emission of such acid mists from any source or device utilized at a process, manufacturing or service-based industry into the ambient air in excess of those standards specified in Table 2106-1, below:

Table 2106-1 Acid Mists Emission Standards

<u>Types of Acid Mist/Vapor</u>	<u>Stack Gas Concentrations (mg/m³ at standard conditions)</u>
Sulfuric Acid, CAS number 7664-93-9, Mist	35
Nitric Acid, CAS number 7697-37-2, Mist and/or Vapor	70
Hydrochloric Acid, CAS number 7647-01-0, Mist and/or Vapor	210
Phosphoric Acid, CAS number 7664-38-2, Mist and/or Vapor	3

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2106.02 Emission Standard for Sulfur Dioxides at a Sulfuric Acid Production Unit. No person shall cause or allow the emission of sulfur dioxide, CAS number 7446-09-50, from a sulfuric acid production unit which exceeds 2 kg per metric ton, or 4 lbs per ton, in any 2-hour average.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2106.03 Emission Standard for Nitrogen Oxides at a Nitric Acid Production Unit. No person shall cause or allow the emission of nitrogen oxides from any nitric acid production unit which exceeds 1.5 kg per metric ton, or 3 lbs per ton, in any 2-hour average.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

Env-A 2106.04 Visible Emission Standard at a Nitric Acid Production Unit. No person shall cause or allow the visible fugitive emissions or visible stack emissions from any nitric acid production unit to be 10 percent opacity or greater for any continuous 6-minute period in any 60-minute period.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2107 VISIBLE EMISSION STANDARDS

Env-A 2107.01 Visible Emission Standards.

(a) Unless otherwise specified in this chapter, no person shall cause or allow visible fugitive emissions or visible stack emissions for any process, manufacturing or service-based industry subject to this chapter to exceed an average of 20 percent opacity for any continuous 6-minute period in any 60-minute period, except as specified in Env-A 2000.

(b) Opacity shall be determined in accordance with Env-A 807.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

PART Env-A 2108 PERMIT, FEE, TESTING, MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

Env-A 2108.01 Permit, Fee, Testing, Monitoring, Recordkeeping, and Reporting Requirements. Sources or devices subject to this chapter shall comply with the following, where applicable:

- (a) Permit requirements specified in Env-A 600;
- (b) Fee requirements specified in Env-A 700;
- (c) Testing and monitoring requirements specified in Env-A 800; and
- (d) Recordkeeping and reporting requirements specified in Env-A 900.

Source. #6428-B, eff 1-18-97 (formerly Env-A 1203)

